computing a value of $\log(x)$ for a binary floating point representation of a particular number x stored in a memory of a computing device utilizing the first degree polynomial in m.

4. (once amended) A method in accordance with Claim 2 wherein computing an approximation to $\log(x)$ comprises the step of computing an approximation written as:

$$y = -\log(x) \approx b, + c, \Delta x + ex\log(2)$$
$$for\ i = 0,\ldots,N-1$$

where:

$$b_i = -\log(a) + \left(\frac{1}{4a_i N}\right)^2 - \left(1 + \frac{1}{2N}\right)\frac{1}{a_i}; \text{and}$$

$$c_i = -1/a_i.$$

12. (once amended) A method in accordance with Claim 10 wherein computing an approximation to $\log(x)$ comprises the step of computing an approximation written as:

$$y = -\log(x) \approx b, + c, \Delta x + ex\log(2)$$

$$for\ i = 0,\ldots,N-1$$

where:

$$b_i = -\log(a) + \left(\frac{1}{4a_i N}\right)^2 - \left(1 + \frac{1}{2N}\right)\frac{1}{a_i}; \text{and}$$

$$c_i = -1/a_i.$$

18. (once amended) A computing device in accordance with Claim 16 wherein said device being configured to compute an approximation to $\log(x)$ comprises said device being configured to compute an approximation written as:

$$y = -\log(x) \approx b_i + c_i \Delta x + ex\log(2)$$

$$for\ i = 0,\ldots,N-1$$

where:

$$b_i = -\log(a) + \left(\frac{1}{4a_i N}\right)^2 - \left(1 + \frac{1}{2N}\right)\frac{1}{a_i}; \text{and}$$

$$c_i = -1/a_i.$$

26. (once amended) A computing device in accordance with Claim 24 wherein said device being configured to compute an approximation to $\log(x)$ comprises said device being configured to compute an approximation written as:

$$y = -\log(x) \approx b_i + c_i \Delta x + ex\log(2)$$

$$for\ i = 0,\ldots,N-1$$

where:

$$b_i = -\log(a) + \left(\frac{1}{4a_i N}\right)^2 - \left(1 + \frac{1}{2N}\right)\frac{1}{a_i}; \text{and}$$

$$c_i = -1/a_i.$$

PLEASE ADD THE FOLLOWING NEW CLAIMS:

29. ~~A method~~ in accordance with Claim 1 further comprising using the approximation to process at least one image of an object of ~~interest~~.

30. A computing device in accordance with Claim 15, said computing device further configured to use the value of $\log(x)$ to process at least one image of an object of interest.